

# FLUID INJECTION NOZZLE

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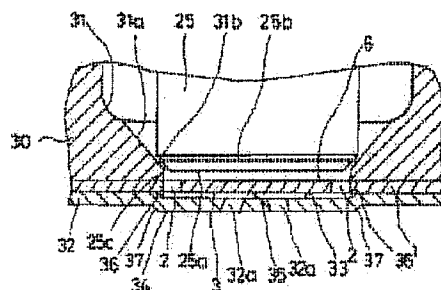
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**Abstract of JP 11200998 (A)**

**PROBLEM TO BE SOLVED:** To provide a fluid injection nozzle which can accelerate atomization of fluid due to the disturbance caused by the collision of fluid flows, has excellent directivity, and can form fluid spray. **SOLUTION:** A plate member 1 is provided on the counter-spacer side of a valve body 30 in the downstream of fuel of a needle valve 25 and has a plurality of opening parts 2 which penetrate through in the direction of plate thickness. An orifice plate 32 has a recessed face 33 and a projecting face 34 in the upstream and in the downstream of fuel respectively, and is attached to the valve body 30 in the downstream of fuel of the plate member 1, and has a plurality of orifices 32a penetrating through in the direction of plate thickness. The orifices 32a are positioned on the inner peripheral side of the opening parts 2. Consequently, it is possible to make fuel flow into a narrow clearance between a face in the downstream of fuel 3 of the plate member 1 and the recessed face 33 of the orifice plate 32 and induce the collision of fuel flows along the recessed face 33 mutually. As a result, it is possible to increase energy of mutual collision of fuel and accelerate atomization of fuel.



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